

103. A method of a virtual network resource infrastructure wherein a plurality of end users at clients access said virtual network resource infrastructure back-end's virtual solution means, comprising:

- a) A plurality of virtual solutions acting as a **container of other virtual solutions** hosted by said virtual network resource infrastructure; and
- b) At least one of said container of virtual solution of step (a) uses said virtual network resource infrastructure hosting means and hosts at least one other **virtual solution**.

104. The virtual network resource infrastructure according to claim 103, wherein said **container of virtual solutions** of step (a) and said **virtual solution** of step (b) are the front-end means, and said virtual network resource infrastructure is the back-end means for said plurality of end users.

105. The virtual network resource infrastructure according to claim 103, wherein said **container of virtual solutions** of step (a) acts as an intermediary between said **virtual solution** of step (b) and said virtual network resource infrastructure.

106. The virtual network resource infrastructure according to claim 103, wherein said **container of virtual solutions** of step (a) and said **virtual solution** of step (b) are **virtually hosted** and not having an infrastructure of their own.

107. A method of virtual network resource infrastructure for hosting virtual solutions, comprising:

- a) Said virtual network resource infrastructure having hosting means for hosting a plurality of **virtual solutions**; and
- b) At least one of said virtual solution **shares** said virtual network **resource** infrastructure back-end's resources means.

108. The virtual network resource infrastructure according to claim 107, wherein said **shared resource** is at least one **good for sale**.

109. The virtual network resource infrastructure according to claim 107, wherein said **shared resource** is at least one **e-service**.

110. The virtual network resource infrastructure according to claim 107, wherein said **virtual solution** is an **e-commerce**.

111. The virtual network resource infrastructure according to claim 107, wherein said **virtual solution** is a **web site**.

112. The virtual network resource infrastructure according to claim 107, wherein said
The virtual network resource infrastructure having means for on-line object translation for translating at least one **page** of at least one of said **virtual solution**, comprising:

- a) An end user at a client initiates a request for a page in a new foreign language other than the currently displayed one and said client transmits said end user request to said virtual network resource infrastructure in the form of a **code reference**;
- b) Said virtual network resource infrastructure having receiving means for receiving said request from said client and said request is a request for a new page in the said end user selected foreign language;
- c) Said virtual network resource infrastructure having processing means for processing a program code and said program code having a **translating function** and said translating function having translating means for translating a page into said user selected foreign language;
- d) Said virtual network resource infrastructure having transmitting means for transmitting said translated page to said client; and
- e) Said client having receiving and displaying means for receiving and displaying said translated page and said translated page is in the said end user selected foreign language.

113. The object translation according to claim 112, wherein said translating function having accepting means for accepting at least one parameter and said parameter is a **code reference**, and said function having returning means for returning its result, comprising:

- a) A **code reference** used by said function for retrieving a database table's row and said retrieved **database table's row** contains different foreign language in each column;
- b) Said retrieved **database table's rows** contains database object in the said end user selected foreign language; and
- c) Said **page** having accepting means for accepting said function's result and said function's result is at least one object in the said end user selected foreign language.

114. The virtual network resource infrastructure according to claim 112, wherein said **translating function** having accepting means for accepting at least one parameter and said parameter is a **code reference**, said translating function having combining means for combining said **code reference** with SQL text string and form a **SQL query expression** and said query expression's result will only include database objects in the said end user selected foreign language, and said function having returning means for returning its result, comprising:

- a) A **code reference** used by said function for retrieving a database table's row and said retrieved table's row contains different foreign language in each column;
- b) Said retrieved database table's rows contains database object in the said end user selected foreign language; and

- c) Said page having accepting means for accepting said function's result and said function's result is at least one object in the said end user selected foreign language.

115. The translating of database objects according to claim 112, wherein said translating function having accepting means for accepting a **code reference** and having combining means for combined said code reference with a SQL text string and said SQL text string is a **query expression** for querying a database, comprising:

- a) A server having processing means for processing said translating function and said translating function will use said **query expression** and perform a database query, and, said query's result will only retrieve database objects in the said end user selected foreign language; and
- b) Said page having accepting means for accepting said translating function's result and said translating function's result will only include database object based from said database query.

116. The virtual network resource infrastructure according to claim 107, wherein said virtual network resource infrastructure having interfacing means for interfacing an end user at a client accessing said virtual network resources' back-end virtual solution means, comprising: said interfacing means is at least one pre-set interface located within said virtual network resource infrastructure and available as a front-end means for said end user at said client.

117. The virtual network resource infrastructure according to claim 107, wherein said virtual network resource infrastructure having means for exchanging a web site's interface where an end user at a client uploads an interface to said virtual network resource infrastructure, comprising:

- a) A client having uploading means for uploading an user's interface and said **user uploaded interface** is the front-end means for an end user at a client accessing said virtual network resource infrastructure's back-end virtual solution means; and
- b) Said virtual network resource infrastructure having receiving and processing means for receiving and processing said end user uploaded interface and creating means for creating a new interface.

118. The exchanging of interface according to claim 117, wherein said **user uploaded interface** is the front-end means for accessing said virtual network resource infrastructure's back-end virtual solution means.

119. The exchanging of interface according to claim 117, wherein said **user uploaded interface** having **guiding means** for guiding said virtual network resource infrastructure's server in the inserting of program code means and processing means for processing said user uploaded interface along with said inserted program code and creating means for creating a new interface.

120. The exchanging of interface according to claim 117, wherein said **user uploaded interface** residing at said virtual network resource infrastructure, another interface having a similar appearance as of said user uploaded interface residing at a different location, and a client having fetching means for fetching more than one interface and displaying means for displaying both of said interfaces with uniform appearance.

121. The virtual network resource infrastructure according to claim 107, wherein said virtual network resource infrastructure having a means for **uploading a file with settings** for the purpose of changing an interface's appearance as to allow the same interface to have more than one appearances and said interface is the front-end means for at least one of said virtual solution hosted by said virtual network resource infrastructure, comprising:

- a) A client having uploading means for **uploading a file with settings** and having transmitting means for transmitting said uploaded file with settings to said virtual network resource infrastructure;
- b) Said virtual network resource infrastructure having receiving and processing means for receiving and processing said **uploaded file with settings** and extracting means for **extracting said file settings' parameters**;
- c) Said virtual network resource infrastructure having inserting means for inserting said **extracted parameters** into said interface;

- d) Said virtual network resource infrastructure having transmitting means for transmitting said interface to a **client** and said interface having a new appearance based on said **extracted parameters**; and
- e) Said **client** of step (d) having receiving and displaying means for receiving and displaying an interface and said interface having an appearance based on said **user uploaded file with setting's parameters**.

122. The virtual network resource infrastructure according to claim 107, wherein said virtual network resource infrastructure having creating means for creating at least one **virtual solution's page** and said **virtual solution's page** containing at least one **object** and said object having at least one **encoded information** and said encoded information is used by said server as **guiding means** for guiding said server in the inclusion of at least one other object in said **virtual solution's page** and said server having transmitting means for transmitting said **virtual solution's page** to a client.

123. The encoded information according to claim 122, wherein said **encoded information** is at least one **form object** within said **virtual solution's page**.

124. The encoded information according to claim 122, wherein said **encoded information** is within said **virtual solution's page**.

125. The encoded information according to claim 122, wherein said **encoded information is at least one word** within said **virtual solution's page**.

126. The virtual network resource infrastructure according to claim 107, wherein said virtual network resource infrastructure having a **user surfing tracking** means for tracking an end user's surfing experience while said end user is accessing said virtual network resource infrastructure's back-end virtual resource means, comprising:

- a) A server supplies information to a client and said server creates a surf user-list for tracking said supplied information to each of said client and said server having storing means for storing a **surf code reference** for each of said information supplied to each of said client and creating means for creating a **surf user-list** in said server for each of said client;
- b) A client with requesting means for requesting a **surf user-list** that is stored in said server; and
- c) Said client having receiving means for receiving said **surf user-list** from said server and displaying means for displaying said **surf user-list**.

127. The surf user-list according to claim 126, wherein each of said information supplied to each of said client has a **surf code reference** and said **surf code reference** is automatically stored in said server for each of said client and available for creating and presenting a **surf user-list** of previously viewed pages.

128. The virtual network resource infrastructure according to claim 107, wherein said virtual network resource infrastructure having means for supplying **targeted content**, comprising:

- a) A plurality of **end users** access said virtual network resource infrastructure and **supply** at least one piece of **information** to said virtual network resource infrastructure;
- b) Said virtual network resource infrastructure having storing means for storing said **end users' supplied information**;
- c) Said virtual network resource infrastructure having a plurality of **contents**;
- and
- d) Said virtual network resource infrastructure having **customized presentation** means for presenting at least one of said **content** of step (c) to at least one of said **end user** of step (a) and said **content** of step (c) is related to said **end user's supplied information** of step (a) and stored at said virtual network resource infrastructure of step (b).

129. The customized presentation according to claim 128, wherein said **content** is **e-service**.

130. The customized presentation according to claim 128, wherein said **content** is **e-commerce**.

131. The customized presentation according to claim 128, wherein said **content** is **advertising**.

132. The customized presentation according to claim 128, wherein said **end-user** **supplied information** is **registration information**.

133. The customized presentation according to claim 128, wherein said **end-user** **supplied information** is **previously visited pages** by said **end user**.

134. The customized presentation according to claim 128, wherein said **end-user** **supplied information** is said **end-user's preferences**.

135. The virtual network resource infrastructure according to claim 107, wherein said virtual network resource infrastructure having **communication** means for communicating with a server computer and said server computer residing at another location other than said virtual network resource infrastructure.

136. The communication according to claim 135, wherein said virtual network resource infrastructure having means for requesting **content** from said server computer; said server computer supplies said **content** to said virtual network resource infrastructure; said virtual network resource infrastructure having means for incorporating said **content** to at least one **virtual solution** hosted by said virtual network resource infrastructure; also, having means for presenting said

virtual solution to an end user at a client accessing said virtual network resource infrastructure back-end's **virtual solution** means.

137. The communication according to claim 135, wherein said virtual network resource infrastructure having means for receiving a **request from a server** computer; said server computer's request is a **request to supply content** to said virtual network resource infrastructure; said virtual network resource infrastructure having receiving means for **receiving said content**; and making said content available to at least one of said **virtual solution** hosted by said virtual network resource infrastructure; also, having means for presenting said **virtual solution** to an end user at a client accessing said virtual network resource infrastructure's back-end **virtual solution** means.

138. A method of virtual network resource infrastructure wherein a plurality of end users access said virtual network resource infrastructure, comprising:

- a) Said **end user supply** at least one piece of information to said virtual network resource infrastructure;
- b) Said virtual network resource infrastructure having **storing** means for storing said end users' **supplied information**;
- c) Said virtual network resource infrastructure having a plurality of **contents**;
- and
- d) Said virtual network resource infrastructure having **customized presentation** means for presenting at least one of said **content** of step (c)

to at least one of said end user and said content is related to said end user's supplied information of step (a) and stored in said virtual network resource infrastructure of step (b).

139. A method of virtual network resource infrastructure wherein a plurality of end users access said virtual network resource infrastructure, comprising:

- a) Said end user supply at least one piece of information to said virtual network resource infrastructure;
- b) Said virtual network resource infrastructure having storing means for storing said end users' supplied information;
- c) Said virtual network resource infrastructure having means for fetching contents from third-party server; and
- d) Said virtual network resource infrastructure having customized presentation means for presenting at least one of said content of step (c) to said end user and said content is related to said end user's supplied information of step (a) and stored in said virtual network resource of step (b).

140. A method of virtual network resource infrastructure wherein a plurality of end users access said virtual network resource infrastructure and view its virtual content resources, comprising:

- a) Said virtual network resource infrastructure having a plurality of virtual contents;

- b) Said virtual network resource infrastructure uses said **virtual content object's information** and insert at least one other **object** to said **virtual content** of step (a); and
- c) Said virtual network resource infrastructure having **presentation means** for **presenting** said **content** of step (b) to said end users.

141. The virtual contents according to claim 140, wherein said **inserted object** is **e-service**.

142. The virtual contents according to claim 140, wherein said **inserted object** is **e-commerce**.

143. The virtual contents according to claim 140, wherein said **inserted object** is **advertising**.

144. A method of virtual network resource infrastructure wherein a plurality of end users access said virtual network resource infrastructure's back-end resources means, comprising:

- a) A plurality of **end users** access said virtual network resource infrastructure and **supply** at least one piece of **information** to said virtual network resource infrastructure;
- b) Said virtual network resource infrastructure having storing means for **storing** said end users' **supplied information**;

- c) Said virtual network resource infrastructure having hosting means for hosting a plurality of **virtual solutions**;
- d) At least on of **said virtual solution** of step (c) having management means for **managing contents within said virtual network resource infrastructure**;
- e) At least one of **said virtual solutions** of step (c) having management means for **managing contents located at a location other than said virtual network resource infrastructure**; and
- f) Said virtual network resource infrastructure **having customized presentation means** for presenting at **least one** of **said content** of step (d), or at least one content of step (e) to at least one of **said end user**, and said supplied content is related to said end user's supplied information of step (a) and stored at said virtual network resource infrastructure of step (b).

145. A method of virtual network resource infrastructure wherein a plurality of end users access said virtual network resource infrastructure's back-end resources means, comprising:

- a) A plurality of **end users** access said virtual network resource infrastructure and **supply at least one piece of information** to said virtual network resource infrastructure;
- b) Said virtual network resource infrastructure having storing means for **storing said end users' supplied information**;

- c) Said virtual network resource infrastructure having hosting means for hosting a plurality of **virtual solutions**;
- d) At least one of said **virtual solution** of step (c) having management means for **managing contents within said virtual network resource infrastructure**; and
- e) Said virtual network resource infrastructure **having customized presentation means** for presenting at least one of said **content** of step (d) to at least one of said **end user** and said supplied content is related to said end user's supplied information of step (a) and stored at said virtual network resource infrastructure of step (b).

146. A method of virtual network resource infrastructure wherein a plurality of end users access said virtual network resource infrastructure's back-end resources means, comprising:

- a) A plurality of **end users** access said virtual network resource infrastructure and **supply** at least one piece of **information** to said virtual network resource infrastructure;
- b) Said virtual network resource infrastructure having storing means for **storing said end users' supplied information**;
- c) Said virtual network resource infrastructure having hosting means for hosting a plurality of **virtual solutions**;
- d) At least one of said **virtual solutions** of step (c) having management means for **managing contents located at a location other than said virtual network resource infrastructure**; and

- e) Said virtual network resource infrastructure **having customized presentation means** for presenting **at least one** of said **content** of step (d) to at least one of said **end user** and said supplied content is related to said end user's supplied information of step (a) and stored at said virtual network resource infrastructure of step (b).

147. A method of virtual network resource infrastructure wherein a plurality of **end users** access said virtual network resource infrastructure's back-end resources means and **customize virtual content**, comprising:

- a) Means for **registering said end users**;
- b) Said virtual network having **creation of virtual contents** means for allowing the creation of **virtual contents** by **at least one** of said **registered end user**;
- c) **Presentation means** for presenting said **virtual contents** of step (b) to any of said **registered end users** of step (a).

148. The customized virtual content according to claim 148, wherein said **creation of virtual contents means** is a **customized satellite e-mail**.

149. The customized virtual content according to claim 149, wherein said **presentation means** will allow a plurality of said **end users** access to any of said **virtual contents** without having to access each one of said a **customized satellite e-mail** individually.

150. The customized virtual content according to claim 148, wherein said virtual network resource infrastructure having means for including at least one **object** in at least one of said **virtual content**.

151. The customized virtual content according to claim 151, wherein said **object** is **e-service**.

152. The customized virtual content according to claim 151, wherein said **object** is **e-commerce**.

153. The customized virtual content according to claim 151, wherein said **object** is **advertising**.

154. A program in a storage medium and which can be read by a computer in which said program is stored and said program having means for processing a virtual hosting in a virtual network resource infrastructure wherein a plurality of clients access said virtual network resource infrastructure's virtual solution means, comprising:

- a) A plurality of virtual solutions acting as a **container of other virtual solutions** hosted by said virtual network resource infrastructure; and

- b) At least one of said container of virtual solution of step (a) uses said virtual network resource infrastructure hosting means and hosts at least one other **virtual solution**.

155. A program in a storage medium and which can be read by a computer in which said program is stored and said program having means for processing a virtual network resource infrastructure, comprising:

- a) Said virtual network resource infrastructure having hosting means for hosting a plurality of virtual solutions; and
- b) At least one of said virtual solutions sharing said virtual network resource infrastructure's resources means.

156. A program in a storage medium and which can be read by a computer in which said program is stored and said program having means for processing a virtual network resource infrastructure, comprising:

- a) Said virtual network resource infrastructure having hosting means for hosting a plurality of virtual solutions and at least one of said virtual solution having management means for managing contents within said virtual network resource infrastructure; and
- b) At least one of said virtual solutions having management means for managing contents located at a location other than said virtual network resource infrastructure.

157. A program in a storage medium and which can be read by a computer in which said program is stored and said program having means for processing a virtual network resource infrastructure wherein a plurality of end users access said virtual network resource infrastructure's back-end resources means and customize virtual content, comprising:

- a) Means for **registering said end users**;
- b) Said virtual network having **creation of virtual contents means** for allowing the creation of **virtual contents** by at least one of said registered end user;
- c) **Presentation means** for presenting said **virtual contents** of step (b) to any of said **registered end users** of step (a).

158. The customized virtual content according to claim 158, wherein said **creation of virtual contents means** is a **customized satellite e-mail**.

159. The customized virtual content according to claim 159, wherein said **presentation means** will allow a plurality of said **end users** access to any of said **virtual contents** without having to access each one of said a **customized satellite e-mail** individually.

Respectfully submitted,


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